

SEQUENCE LISTING

<110> TAKARA BIO INC.

<120> Thermostable RNase H

<130> 663952

<150> JP 2002-254153

<151> 2002-08-30

<160> 16

<210> 1

<211> 211

<212> PRT

<213> Archaeoglobus profundus

<400> 9

Met	Ile	Ala	Gly	Ile	Asp	Glu	Ala	Gly	Lys	Gly	Pro	Val	Ile	Gly
1				5					10					15
Pro	Leu	Val	Ile	Cys	Gly	Val	Leu	Cys	Asp	Glu	Glu	Thr	Val	Glu
				20					25					30
Tyr	Leu	Lys	Ser	Val	Gly	Val	Lys	Asp	Ser	Lys	Lys	Leu	Asp	Arg
				35					40					45
Arg	Lys	Arg	Glu	Glu	Leu	Tyr	Asn	Ile	Ile	Lys	Ser	Leu	Cys	Lys
				50					55					60
Val	Lys	Val	Leu	Lys	Ile	Ser	Val	Glu	Asp	Leu	Asn	Arg	Leu	Met
				65					70					75

2/9

Glu Tyr Met Ser Ile Asn Glu Ile Leu Lys Arg Ala Tyr Val Glu		
	80	85 90
Ile Ile Arg Ser Leu Met Pro Lys Val Val Tyr Ile Asp Cys Pro		
	95	100 105
Asp Ile Asn Val Glu Arg Phe Lys His Glu Ile Glu Glu Arg Thr		
	110	115 120
Gly Val Glu Val Phe Ala Ser His Lys Ala Asp Glu Ile Tyr Pro		
	125	130 135
Ile Val Ser Ile Ala Ser Ile Val Ala Lys Val Glu Arg Asp Phe		
	140	145 150
Glu Ile Asp Lys Leu Lys Lys Ile Tyr Gly Asp Phe Gly Ser Gly		
	155	160 165
Tyr Pro Ser Asp Leu Arg Thr Ile Glu Phe Leu Arg Ser Tyr Leu		
	170	175 180
Arg Glu His Lys Ser Phe Pro Pro Ile Val Arg Lys Arg Trp Lys		
	185	190 195
Thr Leu Lys Arg Leu Thr Thr His Thr Leu Ser Asp Phe Phe Glu		
	200	205 210

Val

211

<210> 2

<211> 636

<212> DNA

<213> Archaeoglobus profundus

<400> 2

atgattgctg ggatagacga agctggaaaa ggacctgtaa taggccctct tgtaatatgc	60
ggagtactgt gcgatgaaga gaccgtagaa tacttgaaga gcgtaggcgt taaagattca	120

aagaagctgg ataggaggaa gagagaggaa ctttacaata tcataaaatc gctttgcaag 180
gttaaggtat tgaaaatatc tgtcgaggat ttgaacaggt taatggaata catgagtata 240
aatgaaatct tgaagagagc ttacgttgaa ataataaggt ctttgatgcc taaagttgtg 300
tacatagact gtccagatat taatgtggag agatttaagc acgaaataga ggagagaacg 360
ggagtggagg tatttgcgag ccataaagcg gacgagatat atccaatagt atctatagct 420
tcgatagtcg caaaagttga aagggatttt gaaatagaca agctgaagaa gatttatgga 480
gactttggga gtggatatcc atcagatcta agaaccatcg aatttttaag gagttatcta 540
agggaacaca aaagttttcc accaatcgta agaaagagat ggaaaactct caaaagattg 600
acaacgcaca ctttaagcga tttctttgaa gttag 636

<210> 3

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer RN-F1 for cloning a gene encoding a polypeptide having
a RNaseH activity from Archaeoglobus profundus

<400> 3

ggcattgatg aggctggnar rgg

23

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer RN-R2 for cloning a gene encoding a polypeptide having

a RNaseH activity from *Archaeoglobus profundus*

<400> 4

ggtagggaaa gctgraancg

20

<210> 5

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer AprRN-1 for cloning a gene encoding a polypeptide having a RNaseH activity from *Archaeoglobus profundus*

<400> 5

ctcttcatcg cacagtactc cg

22

<210> 6

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer AprRN-2 for cloning a gene encoding a polypeptide having a RNaseH activity from *Archaeoglobus profundus*

<400> 6

tttgcgagcc ataaagcgga cg

22

<210> 7

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Tag sequence

<400> 7

ggcacgattc gataacg

17

<210> 8

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer AprNde for amplifying a gene encoding a polypeptide
having a RNaseH activity from Archaeoglobus profundus

<400> 8

aatcgatggt gttcatatga ttgctgggat agacgaagc 39

<210> 9

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer AprBam for amplifying a gene encoding a polypeptide having a RNaseHIII activity from *Archaeoglobus profundus*

<400> 9

gcccacgccc tgggatccct aggctacggg tcctttaag 39

<210> 10

<211> 560

<212> DNA

<213> Hepatitis B virus

<400> 10

ccttcccatg gctgcteggg tgtgctgcca actggatcct gcgcgggacg tcctttgtct 60
acgtcccgtc ggcgctgaat cccgcggacg acccgtctcg gggccgtttg ggcctctacc 120
gtcccttgct ttctctgcg ttccagccga ccacggggcg cacctctctt tacgcggtct 180
ccccgtctgt gccttctcat ctgcgggacc gtgtgcactt cgcttcacct ctgcacgtcg 240
catggagacc accgtgaacg gccaccaggt cttgcccag ctcttacata agaggactct 300
tggactctca gcaatgtcaa caaccgacct tgaggcatac ttcaaagact gtttgtttaa 360
agactgggag gagttggggg aggagattag gttaaaggtc tttgtactag gaggctgtag 420
gcataaattg gtctgttcac cagcaccatg caactttttc acctctgcct aatcatctca 480
tgttcatgtc ctactgttca agcctccaag ctgtgccttg ggtggctttg gggcatggac 540
attgaccgtg ataaagaatt

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Chimeric oligonucleotide primer to amplify a portion of Hepatitis B virus X protein. "nucleotides 18 to 20 are ribonucleotides-other nucleotides are deoxyribonucleotides"

<400> 11

ctcttggact ctcagcaaug

20

<210> 12

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Chimeric oligonucleotide primer to amplify a portion of Hepatitis B virus X protein. "nucleotides 20 to 22 are ribonucleotides-other nucleotides are deoxyribonucleotides"

<400> 12

tcctcccagt ctttaaacam ac

22

<210> 13

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Chimeric oligonucleotide designed as probeW1. "nucleotide 9 is ribonucleotides-other nucleotides are deoxyribonucleotides"

<400> 13

cctacgccac cagctccaac

20

<210> 14

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Chimeric oligonucleotide designed as probeW2. "nucleotides 9 to 10 are ribonucleotides-other nucleotides are deoxyribonucleotides"

<400> 14

cctacgccac cagctccaac

20

<210> 15

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Chimeric oligonucleotide designed as probeW3. "nucleotides 9 to 11 are ribonucleotides-other nucleotides are deoxyribonucleotides"

<400> 15

cctacgccac cagctccaac

20

<210> 16

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide designed as templateW49.

<400> 16

ataaacttgt ggtagttgga gctggtggcg taggcaagag tgccttgac

49